

Art Unit: 1700

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Claims 1-30 cancel

31. An apparatus for reducing the self-adhesiveness of polymer pellets which comprises:

- a) means for introducing polymer pellets into a conduit containing a liquid;
- b) means for moving the liquid through the conduit;
- c) means for controlling the temperature of the liquid;
- d) means for separating the pellets from the liquid;
- e) a classifier for removing pellet fines and dust and oversized pellets; and
- f) means for recycling the liquid.

32. The apparatus of claim 31 wherein the means of introducing the pellets into the conduit comprises a hopper and an eductor.

33. The apparatus of claim 31 wherein the conduit is a pipe having a diameter of in the range of about 2 (5.1) inches to about 10 (10.2) inches (centimeters).

34. The apparatus of claim 33 wherein the pipe has a diameter in the range of about 4 (10.2) to about 6 (15.2) inches (centimeters).

35. The apparatus of claim 31 wherein the conduit is long enough to afford a residence time sufficient to achieve a crystallinity of about 36 to about 45% in pellets of polytrimethylene terephthalate.

36. The apparatus of claim 31 wherein the means for separating the pellets from the liquid is a centrifugal dryer.

37. The apparatus of claim 31 wherein the classifier further comprises a means for combined classifying and cooling.

38. The apparatus of claim 37 further comprising suction means in the classifier for generating air for cooling.

39. The apparatus of claim 37 further comprising a centrifugal blower which provides the air for cooling.

40. The apparatus of claim 37 which further comprises:

- a) a screen for removing pellet fines, dust, and undersizes;
- b) a slice plate section in which air flows through to cool the pellets; and
- c) a perforated bottom plate that retains oversized pellets.

41. The apparatus of claim 40(a) further comprising that the screen is a 8 mesh 0.025 diameter wire screen made of stainless steel.

Art Unit: 1700

42. The apparatus of claim 40(c) further comprising that the bottom plate is a 16-gauge stainless steel perforated plate with 7/32 inch round holes.